

# STATEMENT OF BASIS for Elmwood Park Power, LLC

## TITLE V OPERATING PERMIT RENEWAL

Program Interest (PI): 02624 / Permit Activity Number: BOP150002

### I. FACILITY INFORMATION

Elmwood Park Power, LLC is located at 15 River Rd, Elmwood Park, Bergen county, NJ 07407 and is a power generating plant. The facility is owned and operated by Elmwood Park Power, LLC.

The facility is classified as a major facility based on its potential to emit 283 tons per year (tpy) of nitrogen oxides and 38.2 tpy of volatile organic compounds.

This permit allows individual hazardous air pollutants to be emitted at a rate to not exceed:

HAP	lb/yr
Acrolein	39.2
Arsenic	20.2
1,3 Butadiene	31.4
Cadmium	8.86
Formaldehyde	4340
Lead	17.02
Manganese	1458
Mercury	2.22
PAHs	83.2
Selenium	46.2

### II. AREA ATTAINMENT CLASSIFICATION

The Federal Clean Air Act (CAA) sets National Ambient Air Quality Standards (NAAQS) for six common air pollutants. These commonly found air pollutants (also known as "criteria pollutants") are particulate matter, ground-level ozone, carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), and lead. The US Environmental Protection Agency (USEPA) also classifies areas as "attainment" or "nonattainment" for each criteria pollutant, based on the magnitude of an area's problem. Nonattainment classifications are used to specify what air pollution reduction measures an area must adopt, and when the area must reach attainment. Currently, the entire State of New Jersey is designated as nonattainment for the 8-hour ozone NAAQS. New Jersey is designated attainment for all other pollutants. For nonattainment classification refer to <http://www3.epa.gov/airquality/greenbook/multipol.html>

### III. BACKGROUND AND HISTORY

The equipment that emits air contaminants from this facility include: a combined cycle combustion turbine with water injection to control NO<sub>x</sub> emissions and an ultra-low sulfur diesel fuel oil storage tank.

Table 1 - Operating Permit Revision History (located at the end of this document) provides a summary of all the changes that have been incorporated into the operating permit through seven-day notice changes, administrative amendments, minor modifications, or significant modifications since the approval of the initial operating permit or the most recent renewal thereof. Please refer to the attached explanation sheet for the structure and configuration of conditions of approval, included in the Facility Specific Requirements section of this permit.

Title V facilities whose potential emissions of Hazardous Air Pollutants (HAPs) are above specified thresholds are required to conduct risk assessment as a part of their facility's operating permit application. The Department's review of the health risk assessment conducted for HAPs at this facility is negligible in accordance with Technical Manual 1003.

## STATEMENT OF BASIS for Elmwood Park Power, LLC

### TITLE V OPERATING PERMIT RENEWAL

Program Interest (PI): 02624 / Permit Activity Number: BOP150002

#### IV. BASIS FOR MONITORING AND RECORDKEEPING REQUIREMENTS

The facility's operating permit includes monitoring, recordkeeping and reporting requirements that are sufficient to demonstrate the facility's continued compliance with the applicable requirements consistent with the following:

1. Provisions to implement the testing and monitoring requirements of N.J.A.C. 7:27-22.18, the recordkeeping and reporting requirements of N.J.A.C. 7:27-22.19, and all emissions monitoring and analysis procedures or compliance assurance methods required under the applicable requirements, including any procedures and methods promulgated pursuant to 40 CFR 64; and
2. Where the applicable requirement does not require direct periodic monitoring of emissions, the Department requires periodic monitoring of surrogate parameters sufficient to yield reliable data from the relevant time period that are representative of the facility's compliance with the permit. In this case, continuous monitoring of fuel consumption by the turbine (both natural gas and fuel oil) is required in order to calculate annual emissions of NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, TSP, PM-10 and Sulfuric Acid Mist to demonstrate compliance with annual emission limits.
3. In situations where the underlying applicable requirement did not specify any periodic testing or monitoring, the following factors were considered in the evaluation and determination of the appropriate methodology for compliance demonstration for each emission unit:
  - Pollutant's potential impact on public health and environment.
  - Emission unit and control device (older, less reliable equipment generally require more monitoring to ensure ongoing compliance).
  - Compliance history and margin of compliance.
  - Emissions variability and process stability (emissions units with highly variable process rates or materials generally require more monitoring to ensure ongoing compliance)
  - Quantity of emissions (emissions units that will have more impact on the environment generally require more monitoring to ensure ongoing compliance).

#### V. APPLICABLE STATE AND FEDERAL RULES

The facility is subject to New Jersey Air Pollution Control Regulations, codified in N.J.A.C. 7:27-1 through 34, as applicable. A complete text of these regulations is available at:

<http://www.nj.gov/dep/aqm/rules27.html>

The facility is also subject to Federal regulations listed below.

NSPS Subpart A: General Provisions

NSPS Subpart GG: Standards of Performance for Stationary Gas Turbines

40 CFR 97: Cross-State Air Pollution Rule (CSAPR)

The Greenhouse Gas (GHG) emissions from this facility are 402,538 tpy CO<sub>2</sub>e and there is no GHG emissions increase.

#### VI. FACILITY'S COMPLIANCE STATUS

The Responsible Official at the facility has certified that the facility currently meets all applicable requirements of the Federal Clean Air Act and the New Jersey Air Pollution Control Act. Based on this certification, the Department's evaluation of the information included in the facility's application, and a review of the facility's compliance status, the Department has concluded that this air pollution control operating permit should be approved.

This operating permit includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. A permit shield provides that compliance with the relevant conditions of the operating permit shall be deemed

## STATEMENT OF BASIS for Elmwood Park Power, LLC

---

### TITLE V OPERATING PERMIT RENEWAL

Program Interest (PI): 02624 / Permit Activity Number: BOP150002

compliance with the specific applicable requirements that are in effect on the date of issuance of the draft operating permit, and which form the basis for the conditions in the operating permit.

Also, prior to the expiration of the five-year period, the facility will be required to apply for a renewal of this operating permit, at which time the Department will evaluate the facility and issue a public notice with its findings.

#### **VII. EXEMPT ACTIVITIES**

The facility's operating permit does not include exempt activities such as office and interior maintenance activities, maintenance shop activities, food preparation facilities, cafeterias and dining rooms, etc. A complete list of exempt activities, as allowed by the Operating Permit rule, can be found at N.J.A.C. 7:27-22.1.

Table 1 - Operating Permit Revision History

Permit Activity Number	Type of Revision	Description of Revision	Final Action Date
BOP150003	Administrative Amendment	Update the Facility Profile to reflect the following: Owner (Current Primary) - Dale Lebsack, Environmental Officer - Mark Driscoll, Fees/Billing Contact - Richard Merker, Also changes to organization names.	10/27/2015
BOP150001	Administrative Amendment	Update the Facility Profile to reflect that the Responsible Official, On-Site Manager and Operator are Mr. Richard J. Merker.	2/10/2015
BOP140001	Administrative Amendment	Update the NOx RACT permit conditions for high electric demand day ("HEDD") units as follows: <ul style="list-style-type: none"> <li>• Clarify that the NOx RACT (HEDD) limit is based on net useful energy produced.</li> <li>• Clarify the ozone season and non-ozone season emissions averaging periods</li> <li>• Include the instruction in N.J.A.C. 7:27-19.15(a)(1) to use 40 CFR 75 Appendix F to calculate NOx emissions.</li> <li>• Update the Facility Profile to reflect a new Responsible Official and other contact information updates.</li> </ul>	9/25/2014
BOP120001	Minor Modification	Inlet fogging added to turbine.	7/9/12

FACILITY NAME (FACILITY ID NUMBER)

BOP050001

Activity Number  
(assigned by the  
Department)

## New Jersey Department of Environmental Protection Facility Specific Requirements

Emission unit number  
(assigned by the  
facility)

Brief description of emission unit

Emission Unit: U1 25 MM BTU/hour Boiler burning Fuel Oil and Natural Gas  
Operating Scenario: OS Summary OR OSXX Boiler burning Fuel Oil

OS Summary lists all rules and requirements that apply to an emission unit, regardless of operating scenarios. Emission unit may contain one or more pieces of equipment and the corresponding operating scenarios

OSXX denotes the operating scenario number and lists the rules and requirements that apply to a particular scenario. An operating scenario represents various ways (or scenarios) a piece of equipment can operate.

Records to be kept

Submittal  
requirement

Item  
Number

Description of applicable  
requirement

Air contaminants

Monitoring method to  
ensure compliance

Actions to be  
taken by the  
facility

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Conduct a comprehensive stack test at emission point PTXX at least 18 months prior to the expiration of the approved operating permit to demonstrate compliance with the <u>CO, NOx, TSP and VOC emission limits</u> . [N.J.A.C. 7:27-22.16(e)]	Other: <u>Stack emission testing</u> . Stack test shall be conducted for CO, NOx, TSP, and VOC emissions (add language as needed). Based on any 60-minute period. [N.J.A.C. 7:27-22.16(e)]	Other: <u>Stack test results</u> . [N.J.A.C. 7:27-22.16(e)]	Stack Test - <u>Submit a protocol, conduct stack tests, submit results per the approved schedule. Submit a stack test protocol to the Emission Measurement Section</u> at PO Box 437, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]

Rule citation (subchapter, section, and paragraph) for the applicable requirement

Rule citation for the monitoring requirement

Rule citation for the recordkeeping requirement

Rule citations for the submittal/action requirement